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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/750,189

12/30/2003

Bran Ferren

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GLENN PATENT GROUP
3475 EDISON WAY, SUITE L
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EXAMINER

BROADHEAD, BRIAN J

ART UNIT

PAPER NUMBER

3661

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/750,189	Applicant(s) FERREN ET AL.	
	Examiner Brian J. Broadhead	Art Unit 3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,8,14-16 and 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8,14-16 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 18 August 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-6, 8, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kempen et al., 6421593, in view of Jacob, 6547506.

3. As per claim 1, Kempen et al. disclose a standardized vehicle platform (1417); a plurality of fixation sites along said platform (1681, 1682), said fixation sites comprising standardized interconnection means for any of mechanical, electrical, and fluid interconnection with any one or more of a plurality of specialized functional modules that are readily attached to said standardized platform via said interconnection means, said fixation sites being located along said vehicle platform at standardized intervals to accept one or more of said modules on lines 2-15, on column 29; and a computer implemented control and communications protocol communicatively provided throughout said platform for recognizing any of a module's presence, identity, capability, and function, and for configuring said vehicle accordingly on lines 15-38, on column 29. Kempen et al. do not disclose said fixation sites defining fractional locations along an overall platform extent, wherein said platform receives a plurality of said modules, wherein said modules have an extent that is equal to, or that is a fraction of, said platform extent, and wherein any number of modules having a total, combined extent

that is less than or equal to the extent of said platform may be attached to said platform at any given time; at least two modules, each module providing a unique function, each module comprising a standardized fraction of the total area of the platforms, said modules when affixed to said platform comprising in combination a vehicle suited for a particular use, said modules having fixation means that are located along said modules at intervals that coincide with at least a portion of the fixation sites of said platform.

Jacob teaches said fixation sites defining fractional locations along an overall platform extent, wherein said platform receives a plurality of said modules, wherein said modules have an extent that is equal to, or that is a fraction of, said platform extent, and wherein any number of modules having a total, combined extent that is less than or equal to the extent of said platform may be attached to said platform at any given time in figures 3 and 4, and lines 33-37, on column 3; at least two modules, each module providing a unique function, each module comprising a standardized fraction of the total area of the platforms, said modules when affixed to said platform comprising in combination a vehicle suited for a particular use, said modules having fixation means that are located along said modules at intervals that coincide with at least a portion of the fixation sites of said platform in figures 3 and 4 and items 110, 50, 74, and 76. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the smaller and plural modules of Jacob because such modification would allow municipalities to make better use of their investment in the multi-task truck. Or in other words, the invention would reduce costs by re-using one chassis to do several different tasks which would reduce capital costs for the municipalities or customers.

4. As per claims 3, 4, and 5, Kempen et al. disclose a dedicated path about said platform for effecting individual module control (1460); a computer implemented vehicle operating system for controlling said modules (1511); a plurality of custom interfaces (31,32,33) for any of contact closures, lighting, power, control, and interface to computers on board one or more of said modules.

5. As per claim 6, Kempen et al. disclose means for recognizing said modules personality on lines 15-38, on column 29.

6. As per claims 8, and 14, Kempen et al. disclose means for controlling vehicle operation and configuration, both in accordance with a current vehicle complement of said modules and in accordance with vehicle resources and performance specifications on lines 26-37, on column 16; and means for acknowledging each module, and for performing a background calculation for any of module weight, balance, and power consumption on lines 14-38, on column 29.

7. Claims 15,16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kempen et al., 6421593, in view of Glatzmeier et al., 5785372.

8. As per claims 15, and 16, Kempen et al. disclose a standardized vehicle platform (1417); a plurality of fixation sites along said platform (1681, 1682), said fixation sites comprising standardized interconnection means for any of mechanical, electrical, and fluid interconnection with any one or more of a plurality of specialized functional modules that are readily attached to said standardized platform via said interconnection means, said fixation sites being located along said vehicle platform at standardized intervals to accept one or more of said modules on lines 2-15, on column

29; and a computer implemented control and communications protocol communicatively provided throughout said platform for recognizing any of a module's presence, identity, capability, and function, and for configuring said vehicle accordingly on lines 15-38, on column 29. Kempen et al. do not disclose said fixation sites defining fractional locations along an overall platform extent, wherein said platform receives a plurality of said modules, wherein said modules have an extent that is equal to, or that is a fraction of, said platform extent, and wherein any number of modules having a total, combined extent that is less than or equal to the extent of said platform may be attached to said platform at any given time. Glatzmeier et al. teach said fixation sites defining fractional locations along an overall platform extent, wherein said platform receives a plurality of said modules, wherein said modules have an extent that is equal to, or that is a fraction of, said platform extent, and wherein any number of modules having a total, combined extent that is less than or equal to the extent of said platform may be attached to said platform at any given time in figures 1 and 2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the smaller and plural modules of Glatzmeier et al. because such modification would provide rapid and free assembly of variously fitted equipment cabs...due to rapidly-changing conditions of use, as stated on lines 20-28, on column 1, of Glatzmeier et al.

9. As per claims 18, Kempen et al. disclose means for any of assessing any of module weight, power consumption, size, and functionality; determining whether a complement of modules fit within design limits of said platform; and dynamically

configuring a user interface to express functionality of each of said modules installed on said platform on lines 15-38, on column 29.

Response to Arguments

10. Applicant's arguments with respect to claims 1, 3-6, 8, and 14 have been considered but are moot in view of the new ground(s) of rejection. Jacob better shows the "unique functions" provided by the modules.

11. Applicant's arguments filed 10-13-06, with respect to claims 15, 16, and 18 have been fully considered but they are not persuasive. Applicant argues that Kempen et al. only teaches using one variant module that contains all of the functions of the vehicle. While the variant module would therefore be integral making separable is within the skill of one having ordinary skill in the art. See In re Dulberg, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961). As applied here it would appear that if it were considered to be desirable for any reason to, for example ease of replacement, or adjustments for changing conditions as taught by Glatzmeier et al., it would have been obvious to make the variant module separable for that purpose. Simply put, Kempen et al. is already making a vehicle modular by using one large module, going one step further to make the vehicle more modular by using more smaller modules would only require routine skill in the art at the time the invention was made. It has also been held that mere duplication of the essential working parts of a device only involves routine skill in the art. See St. Regis Paper Co. v. Bemis Co., 193 USPQ 8. In this the addition of more modules would have only required routine skill in the art at the time the invention was made.

12. The argument that Glatzmeier does not provide a plurality of fixation sites is not convincing in view of items 176 and 177.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Broadhead whose telephone number is 571-272-6957. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3661

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BJB



THOMAS BLACK
SUPERVISORY PATENT EXAMINER